

LADDER SAFETY



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"I'm holding the ladder for Bill.
What are you doing?"



General Services Division, Safety



SC Budget & Control Board

Bernie Lee, 737-2315

May 2005

LADDERS ARE

DANGEROUS!



Nearly 300 Deaths &
65,000 Serious Injuries
due to Falls from Ladders
each Year can be prevented
by following:

- COMMON SENSE
- BASIC RULES

LADDER SAFETY

- Selection
- Inspection
- Set Up
- Climbing & Work Safety
- Maintenance & Storage



LADDER SELECTION

EVALUATE the JOB:

- Work Surface
 - Slippery or Uneven?
- Obstructions
 - Enough Room?
 - Congested?
 - Near a Door?
 - Electrical Hazard?



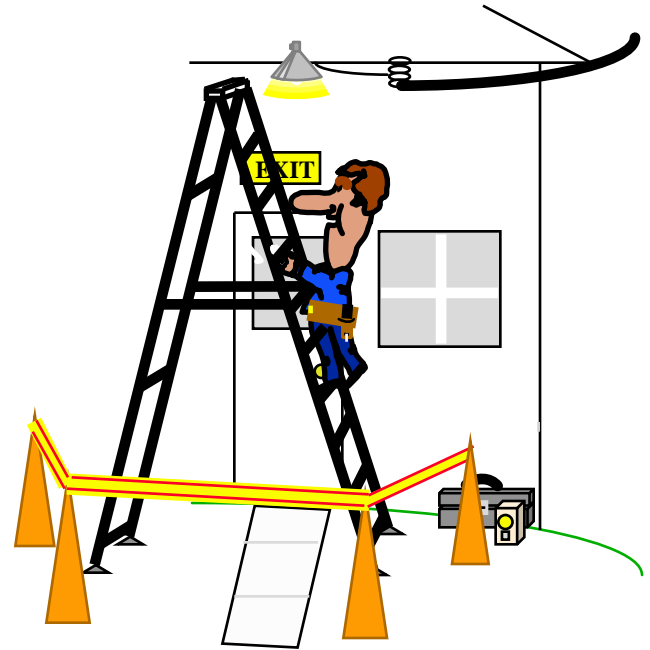
LADDER SELECTION

EVALUATE the JOB:

- How Much Weight?
 - You, Your Tools & Materials
- How High?

HAZARDS:

- **OVERHEAD WIRES** – Avoid > 10'
- **CLUTTER** - Clean Up
- **PEDESTRIAN / VEHICLE TRAFFIC** - Block Off
- **DOORS** - Lock, Block and/or Observer



LADDER SELECTION

Portable

Sectional
(Extension)



Step



Specialty

Extension
Trestle



Warehouse



Fixed



LADDER SELECTION



Right Way



Wrong Way

LADDER SELECTION

Materials



FIBERGLASS

- Electrically Non-Conductive
- Great Value
- Strong
- Leading Choice of Professionals



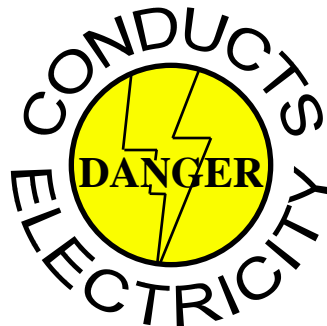
ALUMINUM

- Lightweight
- Corrosion Resistant



WOOD

- Economical
- Electrically Non-Conductive when Clean & Dry



LADDER SELECTION

				
LOAD CAPACITY 375 lbs.	LOAD CAPACITY 300 lbs.	LOAD CAPACITY 250 lbs.	LOAD CAPACITY 225 lbs.	LOAD CAPACITY 200 lbs.
Special Duty/ Professional Use	Extra Heavy Duty/ Professional Use	Heavy Duty/ Industrial Use	Medium Duty/ Commercial Use	Light Duty/ Household Use
Type IAA DUTY RATING	Type IA DUTY RATING	Type I DUTY RATING	Type II DUTY RATING	Type III DUTY RATING

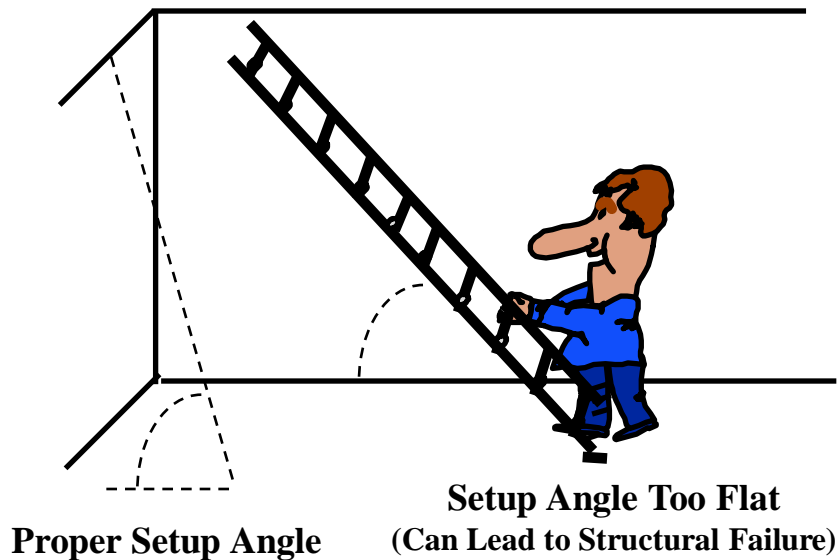
NEVER Exceed Duty Rating

**Add Your Weight + Weight of PPE + Weight of Tool Belt & Tools
+ Weight of Supplies Carried Onto the Ladder**

LADDER SELECTION

Use Proper Length/Height

- To Reach Object
- To Stand at Proper Angle




DO NOT:

- Climb on Top:
 - 3 Rungs of Extension Ladder
 - 2 Steps of Step Ladder
- Set Ladder on Unstable Platform to Gain Extra Height

LADDER SELECTION

ANSI / OSHA LABEL

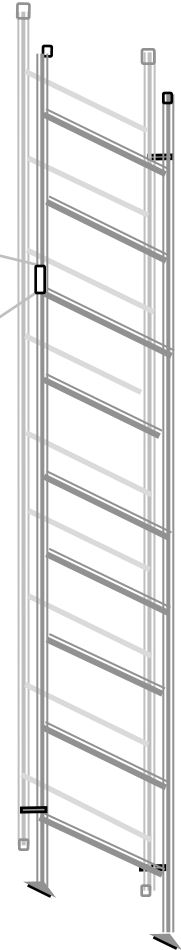
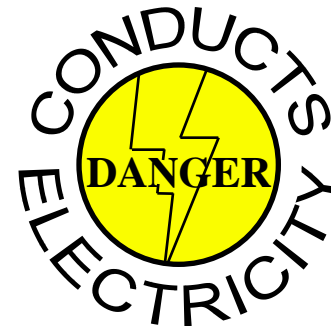
MODEL NO.	
FE3224	
NOTICE	
LADDER SIZE:	24FT
DUTY RATING:	TYPE 1A
LOAD CAPACITY:	300 LBS
HIGHEST STAND- ING LEVEL:	17 FT 3 IN
TOTAL LENGTH OF SECTIONS:	24 FT
LENGTH:	21 FT
DATE OF MANUFACTURE: DEC 93	
	
7 28865 20005 1	
MEETS ANSI CODE A14.5	
MEETS OSHA REQUIREMENTS	
MADE IN <i>USA</i>	

MODEL: Fiberglass 2-Section
Channel Extension

HEIGHT - 24'

Extra-Heavy/Industrial Duty Rating
(300 Lb Maximum Capacity)

Minimum Sectional
Overlap = 3'

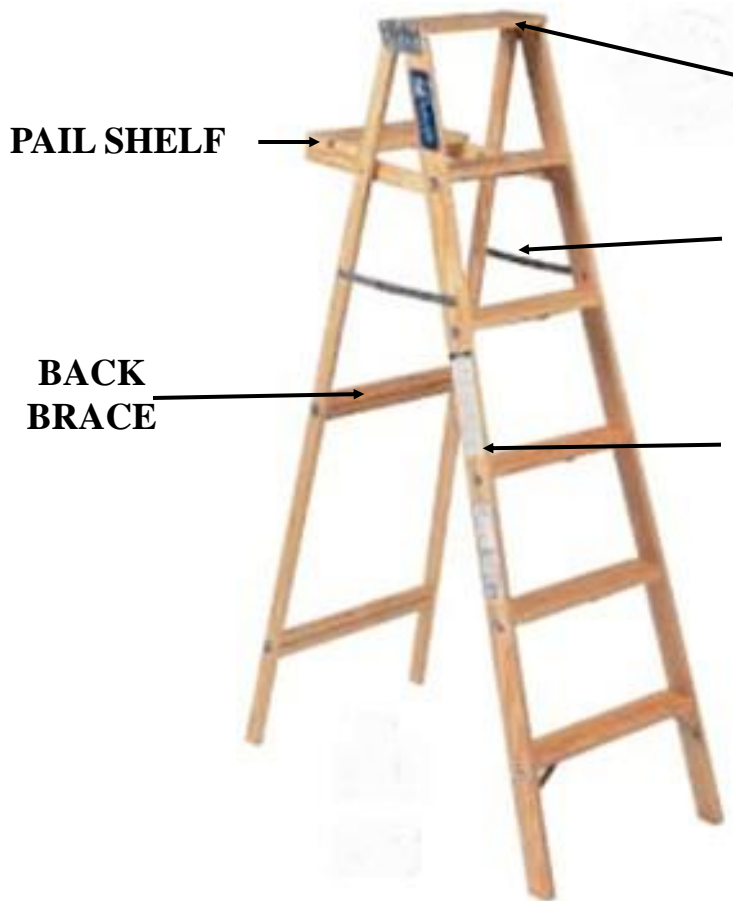


INSPECTING

ACCESSORIES & SAFETY DEVICES



TOOL CADDY



TOP CAP

PAIL SHELF

SPREADER BRACE

**BACK
BRACE**

LABELS

- ANSI / OSHA
- OPERATING & MAINTENANCE INSTRUCTIONS



STEP

**GUSSET
BRACING**



**SHOE w/ SLIP RESISTANT
RUBBER SOLE (ON ALL FEET)**



INSPECTING

ACCESSORIES & SAFETY DEVICES



END CAPS

**SECTIONAL
OVERLAP**

ROPE & PULLEY



RUNG

**RUNG
LOCKS**



SWIVEL SAFETY SHOES



STABILIZER BAR



**PAINT CAN
HANGAR**



LEVELERS



INSPECTING

BEFORE YOU TRAVEL TO YOUR WORK

FEET, SIDE RAILS, RUNGS / STEPS

- BROKEN, MISSING, TIGHTNESS, WORN, SHARP EDGES / POINTS, DEFECTS, CLEAN

HARDWARE, FITTINGS & ACCESSORIES

- FUNCTION, LUBRICATION, SECURE

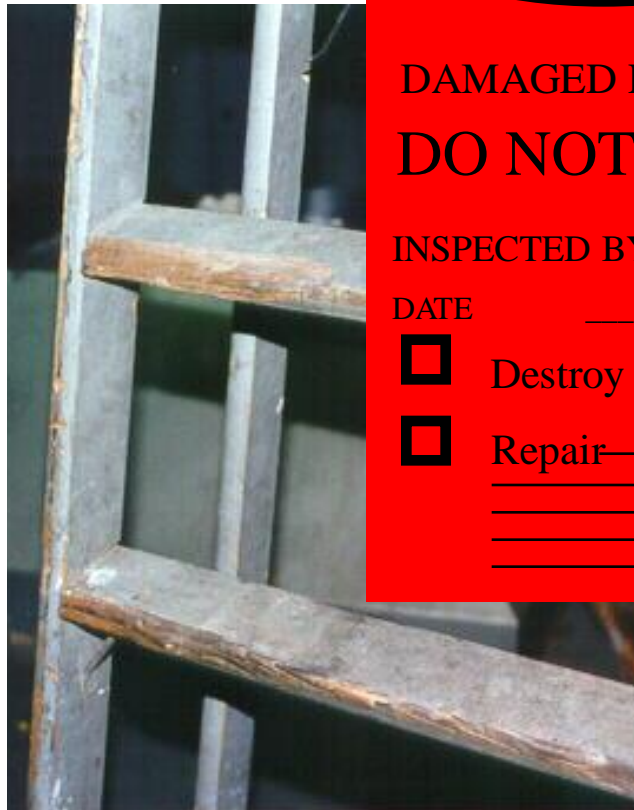




INSPECTING

UNSAFE LADDER

ALWAYS Mark
Unsafe
Ladders with a
DANGER TAG
and Remove for:
Repair by
Authorized Person
or
Immediate
Destruction



DANGER

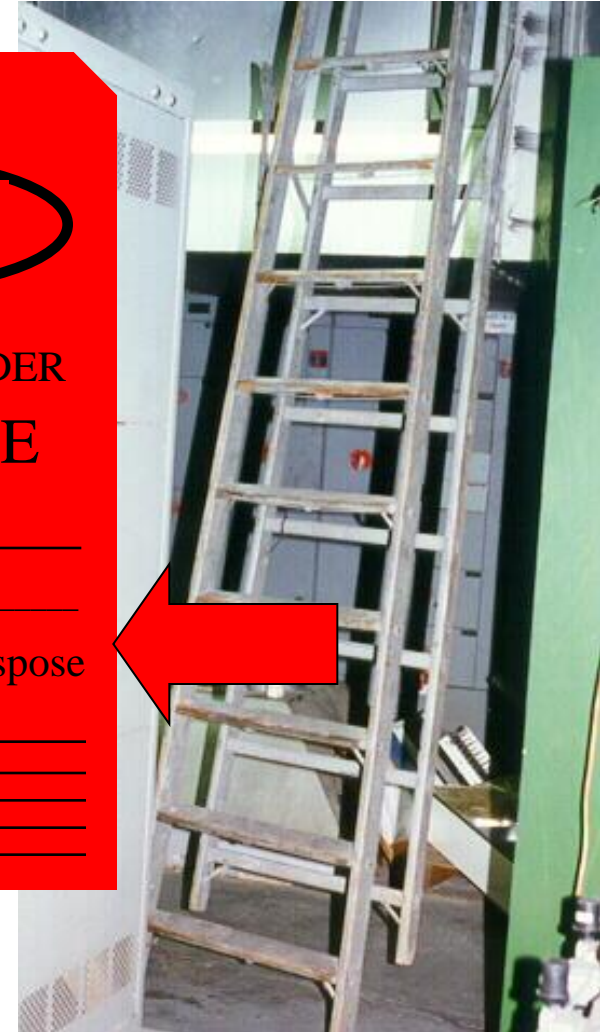
DAMAGED LADDER
DO NOT USE

INSPECTED BY _____

DATE ____/____/____

☐ Destroy & Dispose

☐ Repair _____

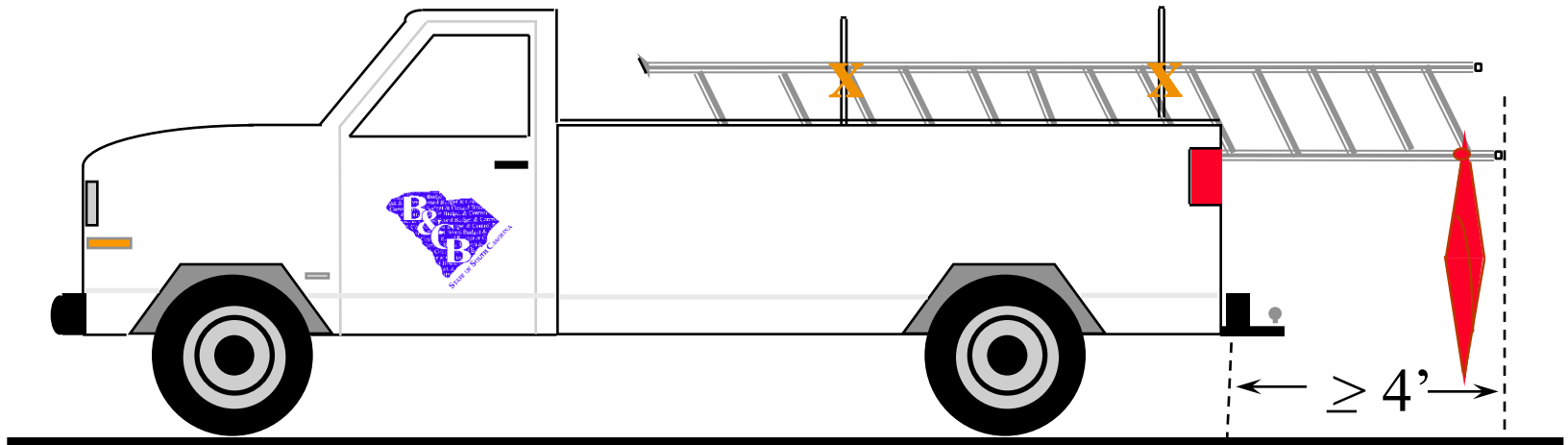




LADDER TRANSPORT

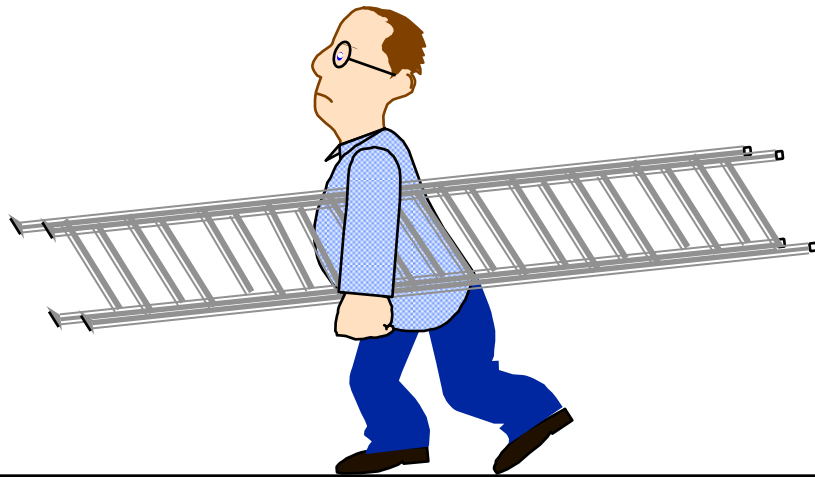
**Secure Both Ends Of
Ladder On Vehicle**

**Flag It If Sticks Out 4'
or More**

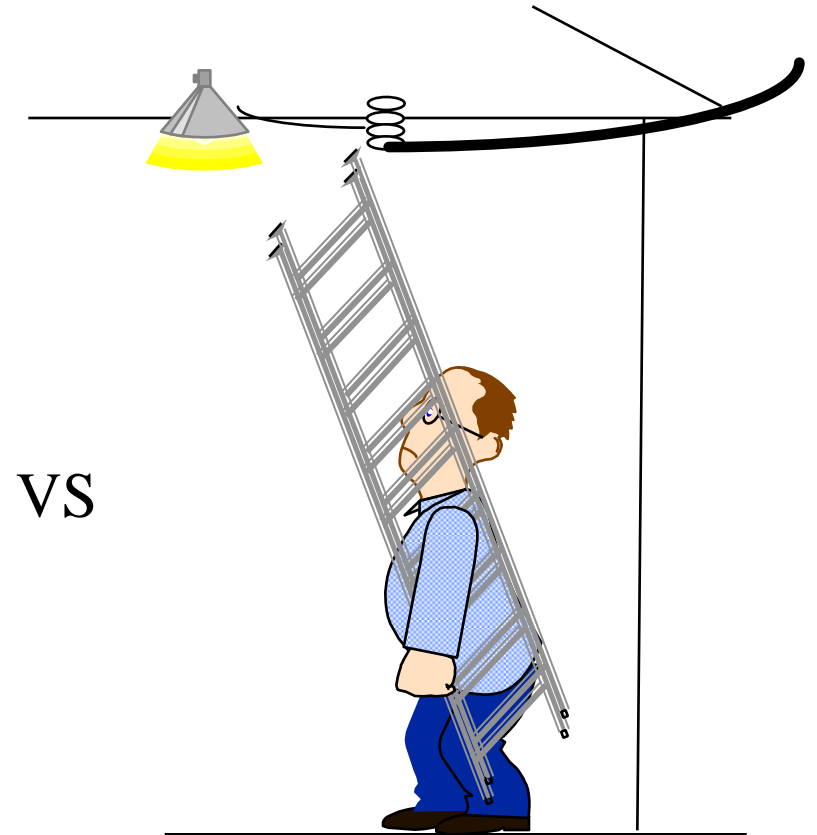


TRANSPORTING A LADDER

RETRACT FLY SECTION

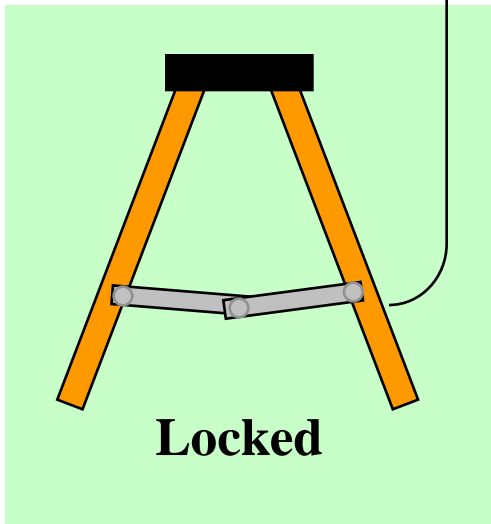
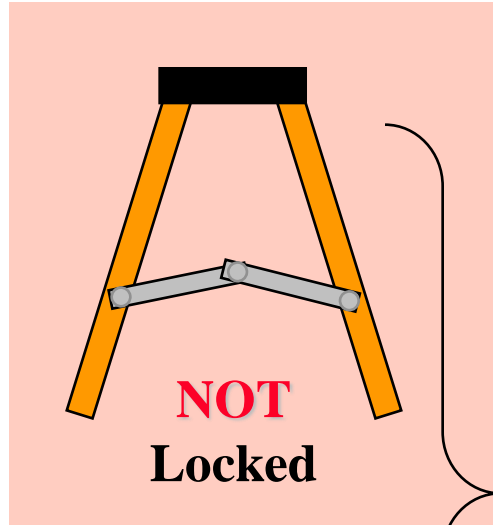


Correct



Wrong

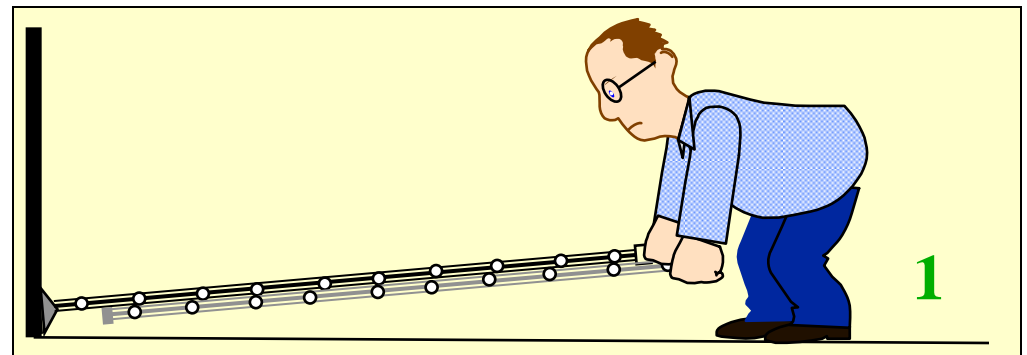
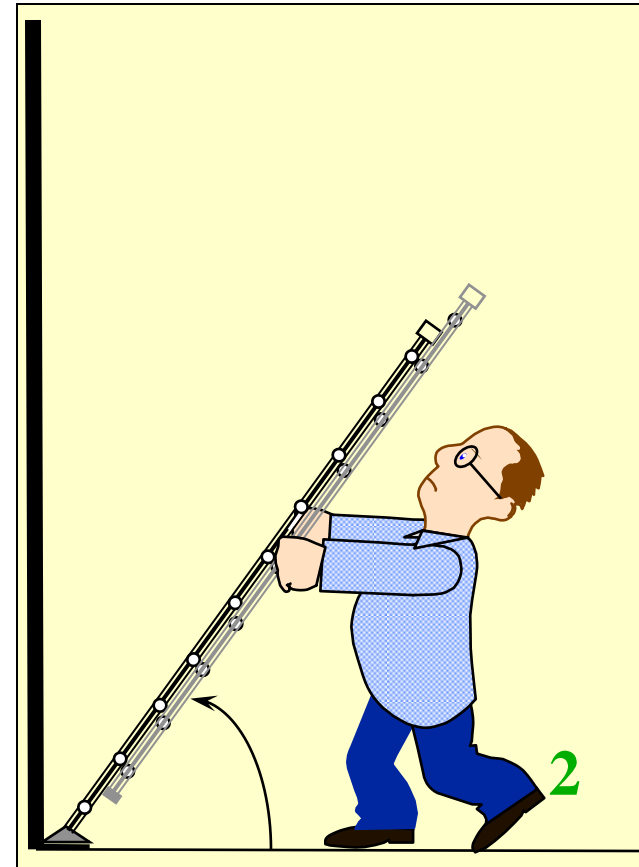
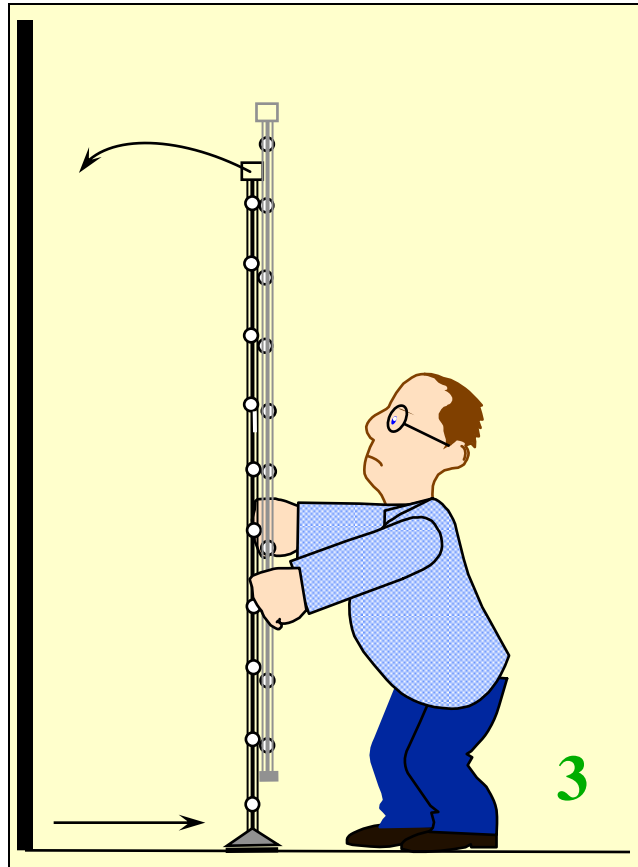
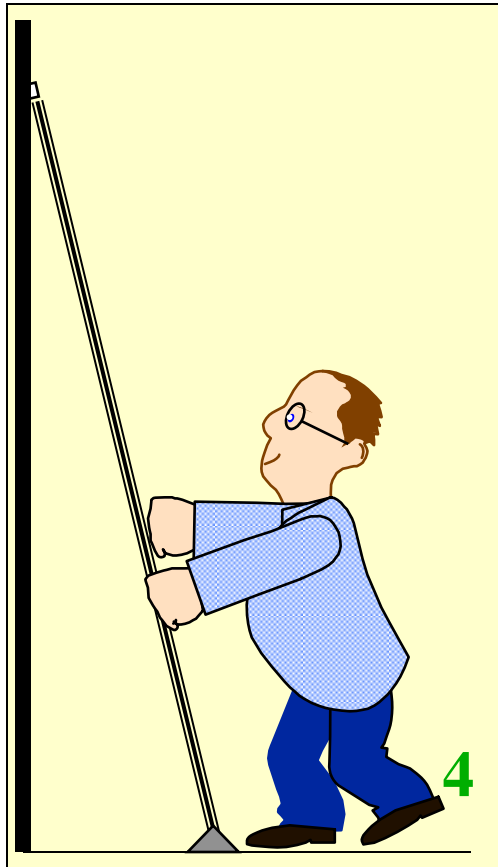
STEP LADDER SETUP



**SPREADER
BRACE**



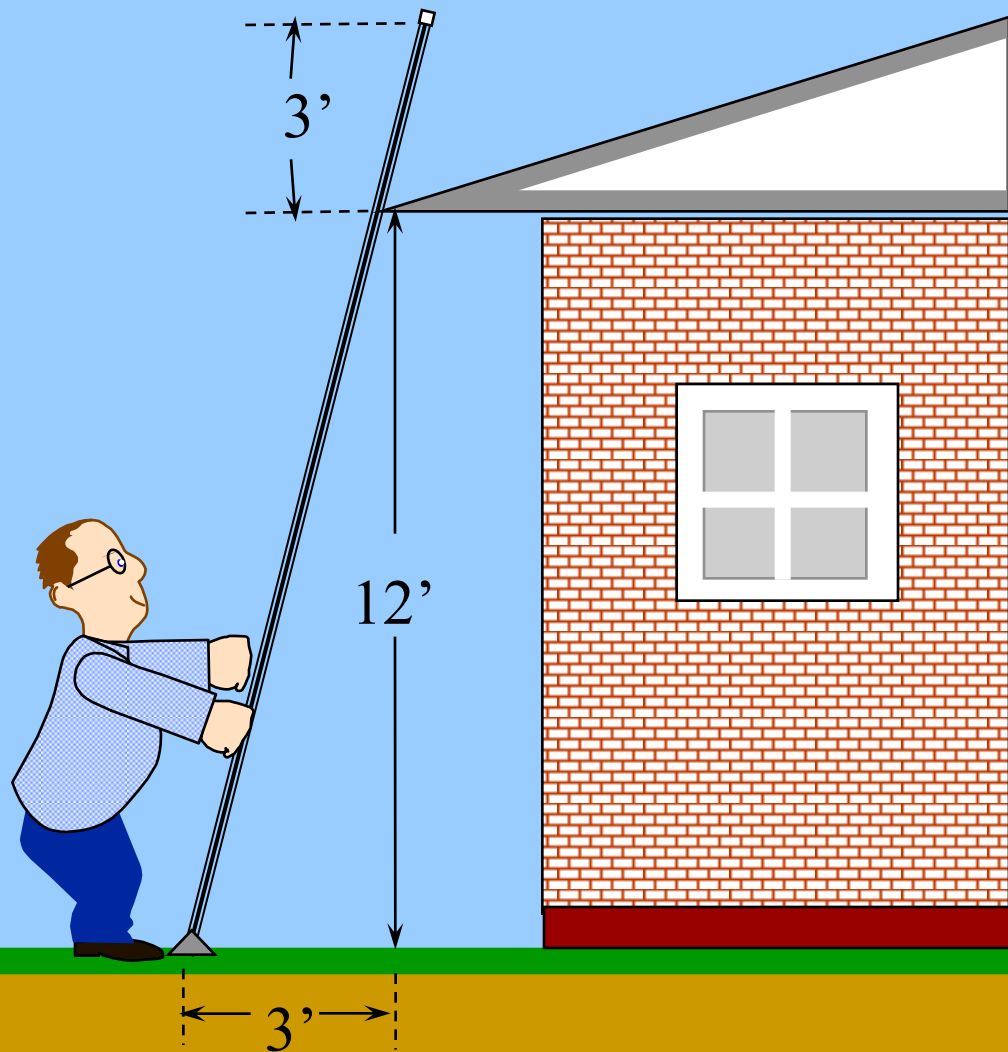
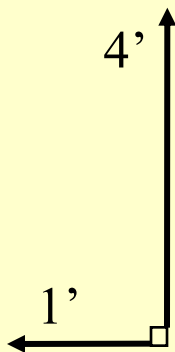
**FEET:
SQUARE & LEVEL**



EXTENSION LADDER SETUP

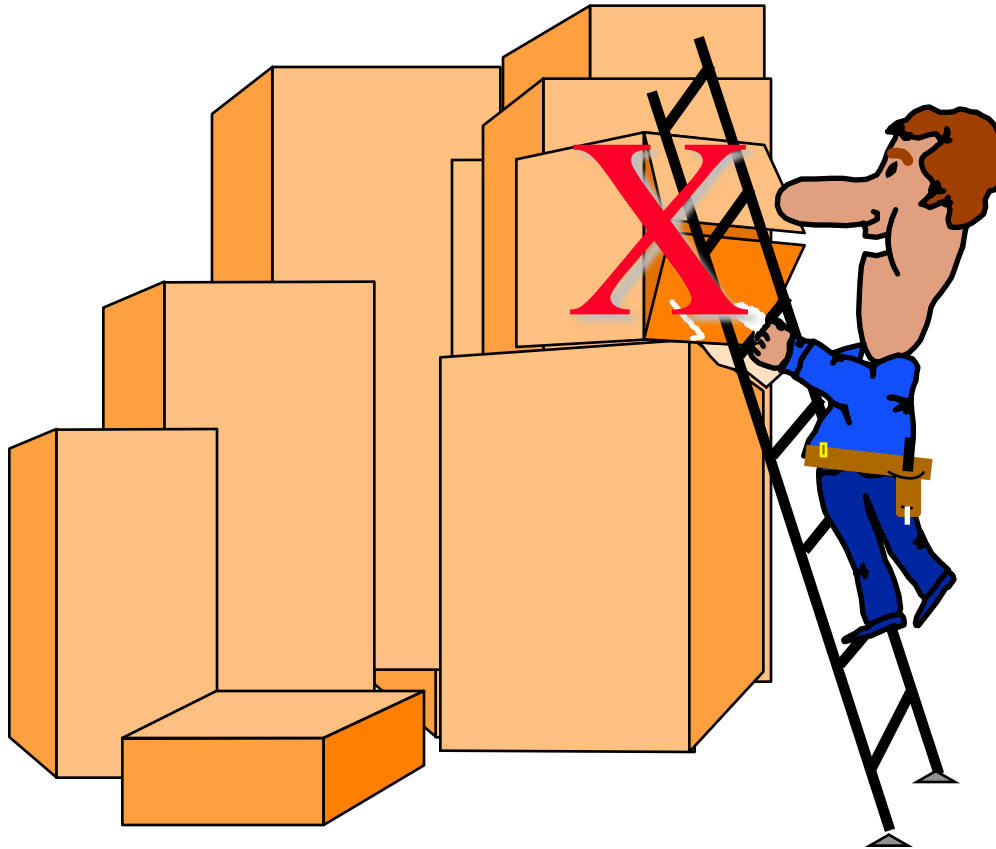


4 - to - 1 Rule



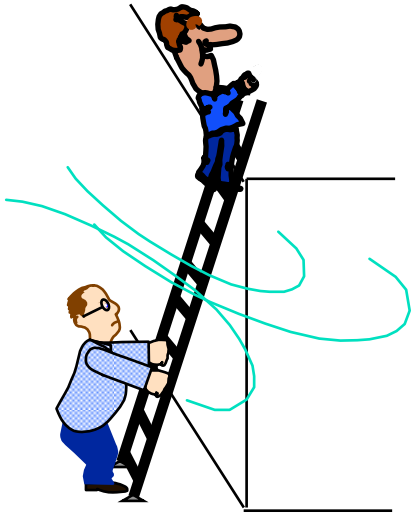
**EXTENSION
LADDER
SETUP**

EXTENSION LADDER SETUP



**DO NOT
LEAN A LADDER
AGAINST BOXES
or Any Other
UNSTABLE OBJECTS
or Surface**

EXTENSION LADDER SETUP



TIP OVER FORCES

- Wind
- Leaning

SECURE THE LADDER

- Tie Top & Bottom
- Tie Sections Together
- Have Someone Hold



CLIMBING and WORK SAFETY

BALANCE:

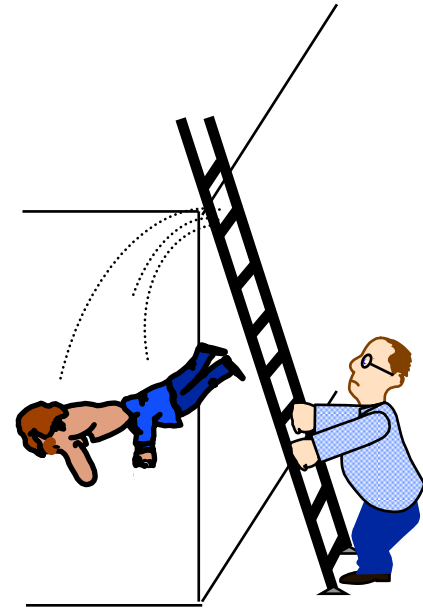
- Go Slow
- Keep 3 Points on Ladder
- Face Ladder Going Up / Down
- Have Large Objects Handed to You
and / or Wear Tool Belt



CLIMBING and WORK SAFETY

FACTORS CONTRIBUTING TO FALLS

- Haste
- Sudden Movement
- Inattention
- Worn or Damaged Ladder
- Physical Age
- Inadequate Footwear

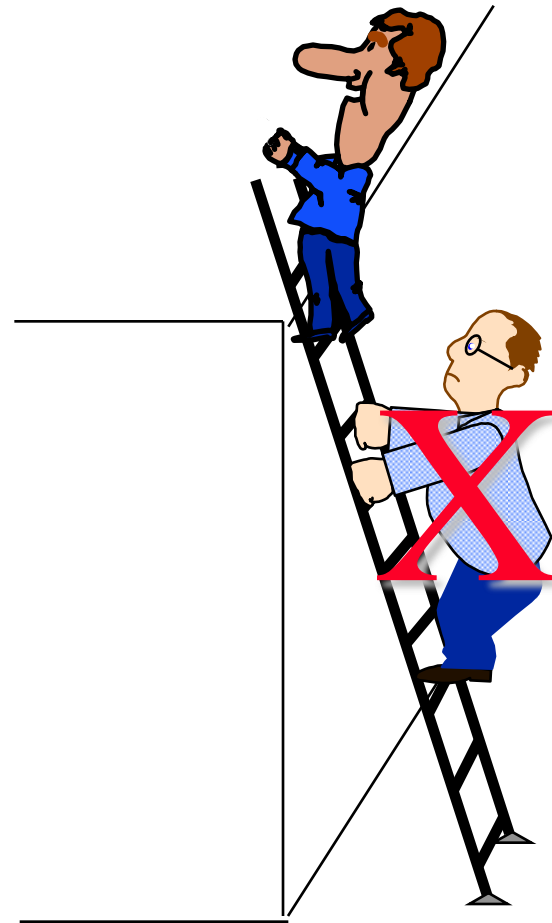


DO NOT OVERREACH

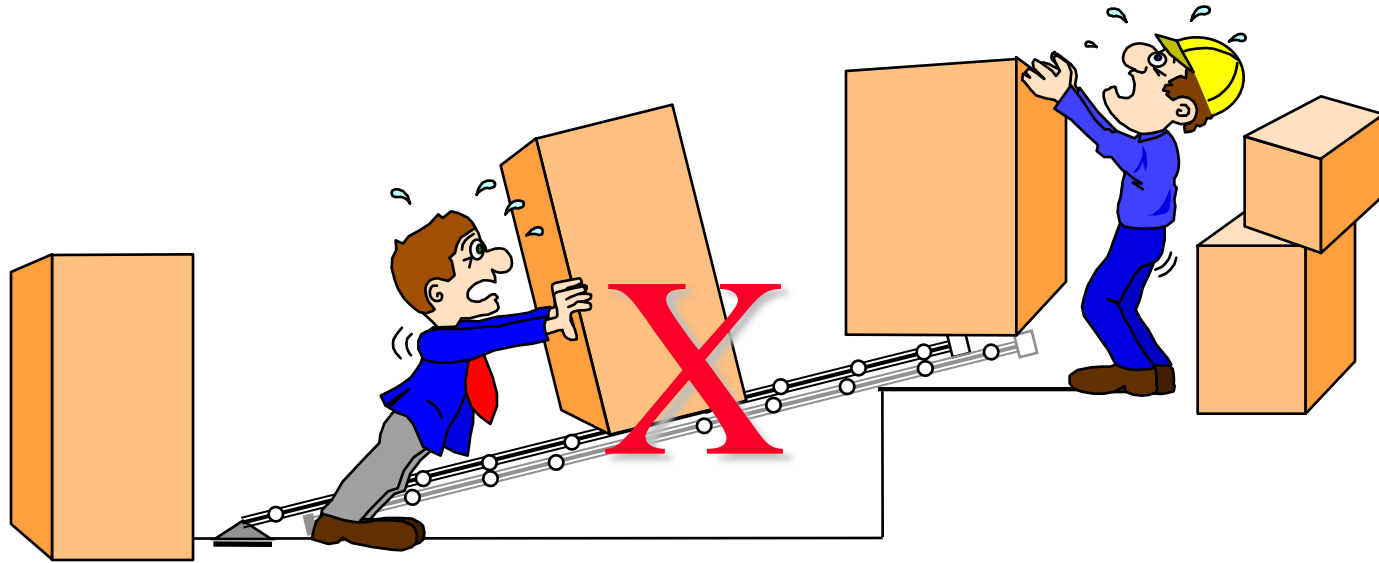
- Keep Belt Buckle Between Rails
- Climb Down and Move Ladder

CLIMBING and WORK SAFETY

**ONLY ONE PERSON ON A
LADDER AT ONE TIME**



CLIMBING and WORK SAFETY



**DO NOT USE A LADDER FOR ANYTHING
OTHER THAN CLIMBING**

(NOT as Guy, Gin Poles, Brace, Skid,
Gangway, Storage Shelf, etc.)

It can be Damaged Leading to Structural Failure

MAINTENANCE and STORAGE



- CLEAN and LUBRICATE Regularly**
- DO NOT PAINT**
- HANG HORIZONTALLY** on Supports every 6'
- PROTECT** from Heat or Cold and Precipitation

SUMMARY

**Don't Fall Down
on the Job !**

EVALUATE the Job Site

SELECT the Best Ladder for the Job
(Type, Load Rating, Height, Material)

INSPECT the Ladder Before Using

SET UP the Ladder Properly

CLIMB and **WORK** SAFELY

MAINTAIN the Ladder Properly

